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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,380

10/15/2003

Theresa Ditter

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09/07/2010

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EXAMINER

BLATT, ERIC D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

09/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/686,380	Applicant(s) DITTER, THERESA	
	Examiner Eric Blatt	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 31-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-10-2010 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kensey et al. (US 5,545,178) in view of Wahr et al. (US 2002/0183787) and Buckman et al. (US 2003/0176890).

Kensey discloses a tissue puncture closure device (Figures 1-5) comprising a carrier tube 88, a filament 42, an anchor 38, a sealing plug 36 comprising a collagen sponge, and a locking apparatus comprising holding member 40 and knot 62 wherein said locking apparatus is separate from the filament, anchor, and sealing plug and is

arranged adjacent the sealing plug for compressing the sealing plug along the filament toward the anchor. Wahr discloses a similar sealing device (Figures 9-11 and 16) wherein a locking element 70 (Figure 16) is provided to urge an anchor 12 and a plug 14 toward one another along a filament 16. Wahr teaches that an alternate locking means may be provided to perform this function wherein the locking means comprises a ratchet mechanism. (Paragraph 72) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Kensey by providing the ratcheting locking mechanism 70 of Wahr since this was a known alternative to press a sealing plug against a puncture and its use would not have produced unexpected results.

With regard to the claimed ratchet structure, Wahr states only that the locking element 70 may acts as a ratchet mechanism, but does not provide a drawing showing detailed structure of this system. Buckman discloses a ratchet mechanism that functions similarly to that of Wahr wherein the structure of the mechanism is fully depicted. Buckman discloses a ratchet mechanism comprising a hub 28, an elongated track 18, a plurality of sloping teeth 20, and a shoulder stop for limiting movement of the hub (the flat side of each tooth acts as a shoulder stop preventing the locking hub from traveling backwards), and that the hub 28 comprises a nut having a flexible internal finger 32 wherein said finger comprises a notch or an external corner shaped to mate a surface of the plurality of sloping teeth. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus taught by Kensey and Wahr by providing the ratcheting locking mechanism taught by Wahr such

that it comprises the structure of the Buckman ratchet mechanism since Wahr fails to detail the structure of the disclosed ratchet mechanism and the Buckman structure would have functioned well for the intended purpose.

In the response filed 6-10-2010, Applicant correctly notes that Wahr and Buckman, relied upon for their teachings of locking hubs that linearly slide along a ratchet mechanism, fail to disclose a ratchet strap that is separate from and attached to a filament. Wahr appears to suggest using the filament itself as a ratchet strap while Buckman discloses only a ratchet strap wherein said strap is not attached to a filament. When modifying the Kensey apparatus to use the ratcheting locking means disclosed in Buckman, one skilled in the art would have a choice between providing a separate ratchet strap (similar to the strap disclosed in Buckman) along the filament 42, or alternatively, to integrally form ratchet teeth along the filament 42 itself so as to form a ratchet strap that is integral with the filament 42. It would have been obvious to one of ordinary skill in the art to form the ratchet strap either integrally with the filament 42 or such that it comprises a separate element attached to the filament since it has been held that wherein two devices are differentiated only in that components of the devices are separable or integral, making those components either separable or integral does not patentably distinguish the devices. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) By forming the ratchet track of the modified Kensey apparatus such that it is a separate element disposed along the filament 42, the device will comprise a first member (the ratchet track) that maintains a fixed position relative to the filament, and a

second member (the hub) that is movable along the filament relative to and in contact with the first member.

The teeth of the modified device would comprise the claimed first member that maintains a fixed position relative to the filament, and the hub of the modified device would comprise the claimed second member that is movable along the filament relative to the first member.

Response to Arguments

Applicant's arguments filed 6-10-2010 have been fully considered but they are not persuasive.

As previously discussed in the body of the rejection, Applicant argues that the claimed device distinguishes over the teachings of Kensey, Wahr and Buckman because none of these references individually disclose a ratchet strap that is separate from and attached to a filament. For this reason, Applicant submits that the combination as set forth in the rejection fails to meet the limitations that the locking apparatus comprises a ratchet mechanism including a first member that maintains a fixed position relative to the filament and a second member that is movable along the filament relative to and in contact with the first member. In response, Examiner holds that in modifying the Kensey apparatus to use the ratcheting locking means disclosed in Buckman, one skilled in the art would have a choice between providing a separate ratchet strap (similar to the strap disclosed in Buckman) along the filament 42, or alternatively, to integrally form ratchet teeth along the filament 42 itself so as to form a

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ratchet strap that is integral with the filament 42. It would have been obvious to one of ordinary skill in the art to form the ratchet strap either integrally with the filament 42 or such that it comprises a separate element attached to the filament since it has been held that wherein two devices are differentiated only in that components of the devices are separable or integral, making those components either separable or integral does not patentably distinguish the devices. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) By forming the ratchet track of the modified Kensey apparatus such that it is a separate element disposed along the filament 42, the device will comprise a first member (the ratchet track) that maintains a fixed position relative to the filament, and a second member (the hub) that is movable along the filament relative to and in contact with the first member.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Blatt whose telephone number is (571)272-9735. The examiner can normally be reached on Monday-Friday, 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. B./

Examiner, Art Unit 3734

/TODD E. MANAHAN/

Supervisory Patent Examiner, Art Unit 3734